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ABSTRACT

This essay discusses the expanded role for two-year postsecondary institutions. It suggests that global competition and recent developments in new technologies are creating new conditions in the workplace and in the postsecondary educational system. These conditions are creating an increased demand for highly skilled workers, new management styles, and entrepreneurial skills. These workplace trends suggest the need for community colleges to emphasize an institutional and public commitment to economic development as a community enterprise. The essay outlines some possible strategies for fostering economic development through partnerships between industry and postsecondary institutions. It also analyzes the effects upon the United States of lower wages being paid by industrialized countries to hire workers in developing countries. In response to global competition, U.S. industry began to consider automated systems and computer programs. The two-year colleges demonstrate an important potential to expand their participation in community development within the context of emerging vocationalism, but questions remain as to whether they can make the changes necessary to support the needs of the established local industry, help individuals ease the transition to business ownership, and become proactive players in the development of the community. Contains 21 references. (NB)

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FOSTERING ECONOMIC DEVELOPMENT: OPPORTUNITIES AND CHALLENGES IN POSTSECONDARY EDUCATION

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Fostering Economic Development: Opportunities and Challenges in Postsecondary Education

An Essay by

Victor M. Hernandez-Gantes, Robert P. Sorensen, and Alejandro H. Nieri
Center on Education and Work, University of Wisconsin-Madison

Paper presented at the Second Great Lakes Leadership Conference on Education and Work under the theme "Work and Learning: Effective Policies for Making Systemic Connections." October 30-November 1, 1994, Milwaukee, WI.

Fostering Economic Development: Opportunities and Challenges in Postsecondary Education

An essay by

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The purpose of this essay is to discuss an expanded role for two-year postsecondary institutions. We will argue that global competition and recent developments in new technologies is creating a new set of demands for both the workplace and the postsecondary educational system. Specifically, that these changes are placing an increasing demand for: (1) highly skilled workers who can adapt to and can function in high performance jobs, and (2) new management styles and entrepreneurial skills to recognize changes and improve business performance. We will argue that these trends in the work place and global market, suggest the need to reevaluate the role of two-year postsecondary education to emphasize an institutional and public commitment to economic development as a community enterprise. Further, we outline some possible strategies to foster economic development through partnerships between industry and postsecondary institutions. The implications to foster economic development are presented in terms of strategies for participation in strategic economic development planning of communities, opportunities for development of human capital resources with focus on entrepreneurship, and potential participation with business services and programs. The focus is on identification of specific opportunities for services and programs which may be provided or sponsored by two-year colleges.

Global Trends and New Technologies

The 1980's brought a new set of demands to both economic development and the educational system supporting the preparation of the labor force. A revised global approach

to economic development forced the nations of the world to confront new realities in the form of increased global competition, development and application of new technologies to production processes, and labor movement across nations to benefit from comparative advantages on human resources, capital, and technology. This high-performance scenario demands new management styles, workers' skills, and education and training opportunities to meet management and employees' needs (Office of Technology Assessment, 1990; SCANS, 1991).

As businesses in industrialized nations take advantage of lower wages in developing countries, a new set of labor market forces have emerged. Trade agreements have opened up the doors for less-controlled flow of goods and services, and a rigid multi-national approach has been slowly replaced by more flexible partnership agreements between large corporations and local companies around the world. A number of countries from Latin America and the Asian-Pacific regions are expected to experience significant economic growth as a result of global investment and competition (Organization for Economic Cooperation and Development, 1992). In the United States, the impact of these changes have resulted in interrelated changes moving from: national to international markets, low-skilled to high-skilled jobs, standard products and services to higher-quality/world-class standards, labor intensive production to high-tech manufacturing, top-down management to quality-oriented and participatory styles, and independent participation of small companies to business alliances (Bosworth, 1992).

Responding to global competition, U.S. industry began to consider automated systems for manufacturing process and computer programs to help develop, produce, and market products. The impact of high technology on the job is an issue of particular importance for small business because it requires access to updated technologies and the skills to use them

(Bosworth, 1992). To keep up with these changes, new skills are being demanded from workers in the high performance workplace scenario including team work, critical thinking, problem solving, and communication skills (Bailey, 1991). However, it has been reported that the majority of high school students who enter the work force do not possess the necessary skills for effective and rewarding participation in the workplace (National Center on the Economy, 1990; Committee for Economic Development, 1992). Thus, many unskilled workers are losing their earning power and joining the ranks of the unemployed. Deficient preparation for high performance jobs results in significant transition problems for about half of the high school graduates annually (William T. Grant Foundation Commission on Work, Family and Citizenship, 1988).

Further, demands for new skills are also extended to managers and entrepreneurs who are required to implement different management styles and entrepreneurial skills to recognize changes and improve business performance (Office of Technology Assessment, 1990; SCANS, 1991). A study conducted by Coopers and Lybrand (1989) indicated that a majority of manufacturing executives understand the value of participatory management to implement advanced technology and increase productivity in the workplace. However, departure from top-down management practices appeared to be problematic in most instances where entrepreneurial activity was not fostering a corporate culture receptive to long term productivity through true participatory management (Boshworth, 1992).

Implications for Two-Year Colleges

Indeed, it has been widely documented that the American workplace is rapidly changing in response to global competition and the utilization of new technologies. These changes are placing an increasing demand for highly skilled workers who can adapt to and function in high performance jobs. Further, it is evident entrepreneurial skills are also required

to anticipate changes, identify opportunities, and create a high performance working environment according to the realities demanded by global competition. But what are the implications for two-year colleges? What are the challenges and opportunities for postsecondary institutions?

Traditionally, the role of two-year public colleges has been to respond to the training needs of America's industry, need for educational services to adolescents, and focus on equity and access through postsecondary education (Cohen & Brawer, 1989). That is, two-year postsecondary education usually reacts to industry or societal needs when these needs become pressing. Current trends in the work place and global market, suggest the need to reevaluate the role of two-year postsecondary education to emphasize an institutional and public commitment to economic development as a community enterprise. Thus, the role of community and technical colleges may need to embrace not only the concept of education and training but also the personal development of individuals and communities as a whole. Presently, this role is evolving and attempting to meet the challenges brought about by the impact of global competition on the way the workplace operates (Melville & Chmura, 1991). This movement points towards a more proactive rather than a passive role in economic development in two significant ways: Investing in the development of human resources through quality educational and training services and programs, and participation in business partnerships to actively integrate technical postsecondary education with community development.

Investing in Development of Human Resources

Gray (1994) outlined some of the limitations of current forms of vocationalism. He defines vocationalism as the "method used by schools, particularly high schools, to organize their curriculum so that students may develop skills, both vocational and academic, that will

give them the strategic labor market advantages needed to compete for good jobs" p. 129. The old form, he indicates, focus on preparation for careers through school-run vocational programs and enrolls about one-third of the high school student population. This arrangement consisted of selection of a course of study on an occupation of interest: home economics, commercial education, industrial education, and agriculture. Enrollment in traditional vocational education, he argues, began to decline in favor of the second form of vocationalism which emphasizes college preparatory programs because students believe that higher education will enhance their career aspirations. Gray notes that the result is that students are graduating from high school with deficient preparation to either work of attend college. In fact, Farnsworth (1991) reported that:

> *"Seven out of 10 of the new jobs will not require a four-year degree, but most will demand one or two years of technical education. Eighty-eight percent of the workers entering the work force will be women, Blacks, Hispanics, or Asian, with the bulk of retirees being White men. Currently, one-quarter of the students who enter the ninth grade in the United States do not graduate from high school. One out of four drops out before receiving a high school diploma. Out of the 50 percent who do graduate from, approximately half go on to additional schooling, leaving 60 to 65 percent of those who enter the work force underprepared for tomorrow's job market" p. 54.*

Given these troubling statistics, a third form of vocationalism is emerging and advocated by current legislation (e.g., Tech Prep, youth apprenticeship, career academies). The goal is to motivate, prepare, and inform students for productive enrollment in two-year postsecondary institutions upon graduation from high school (Gray, 1994). These initiatives are designed to face the challenges posed by high-tech/high-wage workplaces through

connecting activities with postsecondary institutions and local industry. This strategy is a form of investment on the development of human capital essential to support the demands of today's economic realities (Gonzalez, 1991; Melville & Chmura, 1991). The educational vehicle is a form of emerging vocationalism which focus on new competencies demanded in high-performance workplaces, integration of vocational and academic education, linkages between secondary and postsecondary education, and integration of school- and work-based learning experiences (Hayward & Benson, 1993; Rosenstock, 1991). Two other working strategies fit into the role of postsecondary institutions in developing human resources: (1) Continue designing and providing customized training programs for local industry with focus on new competencies and skills; and (2) serve as a broker to provide educational opportunities and placement information for displaced workers, job training programs, and other continuing education programs for adult learners sponsored by a number of government agencies (Melville & Chmura, 1991).

Fostering Community Economic Development: Opportunities and Challenges

Assuming a leadership role in community economic development requires of more proactive participation in strategic planning, and involvement in broad-based community partnerships. Because of the close ties with key community players, this appears to be a natural role for postsecondary institutions. However, active participation in community development has been largely underestimated due to political implications, short-term vision, inadequate leadership; and funding, management and time considerations (Kopececk, 1991). When these obstacles are overcome, the benefits can provide a sustained framework for economic development. Indeed, some states have already demonstrated the benefits of the participation of community/technical colleges in providing technical assistance and technology transfer to small business. In 1991, for instance, 144 community colleges sponsored

assistance centers to small businesses (Carmichael, 1991). This contribution can also be complemented through partnerships with local industry to provide internships, scholarships, specialized training, and programs focusing on entrepreneurial development (Weinberg & Burnier, 1991).

Other opportunities to participate in economic development efforts include the provision of business services to promote international trade with focus on consulting services addressing international relations, information on global foreign markets, import/export procedures, step-by-step trading operations, and creation of local networks of professionals to support these services (Gell & Crupi, 1991). Similarly, business services to assist in product development, patenting procedures, production, marketing, and management operations of local companies are great opportunities for participation in local economic development efforts. Further, high tech demonstration centers and practical training on the use of a wide variety of computer applications for business and manufacturing purposes represent strategies for productive alliances with community agencies and industry (Kent, 1991).

Of these opportunities, business incubation offer perhaps, one of the most comprehensive strategies to promote entrepreneurship, help create jobs, and stimulate economic growth, and revitalize rural areas or depressed neighborhoods. Business incubators, provide commercial space at low cost and a host of business services to help entrepreneurs survive successfully, earlier stages of business development (NBIA, 1992). Although in rural areas academic institutions including two-year colleges usually operate these facilities, the total number of incubators sponsored or managed by two-year postsecondary institutions is small---only 25, according to the National Business Incubation Association (1992). Business incubators provide opportunities to integrate education and training opportunities with focus on entrepreneurship, business, management, trade, basic skills, and

training. Further, they serve as vehicle to support local business development and jobs by providing consulting services and stimulating business alliances (Carmichael, 1991; NBIA, 1992; Weinberg & Burnier, 1991).

Based on current economic and education trends, it is evident that the role played by technical education at the secondary and postsecondary level is changing in the United States. Two-year colleges, in particular, show an important potential to expand their participation in community development within the context of emerging vocationalism and the new demands of the workplace. Various strategies to work in partnership with community players, and the provision of additional services to employers, workers, and students are encouraging but still isolated: training and education on entrepreneurship, transfer of technology, and entrepreneurial development through participation in business assistance centers and small business incubators. The questions that remain are whether community and technical colleges can revisit and implement an expanded role to prepare students for a productive school-to-work transition, help individuals ease the transition to business owners, support the needs of the established local industry, and become proactive players in the development of the community.

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